

# Linears - Unit Review Key

$$1) \frac{13-7}{6-4} = \frac{6}{2} = 3 \quad 2) \frac{3-3}{-4-5} = \frac{6}{-9} = -\frac{2}{3} \quad 3) \frac{6-3}{12-6} = \frac{3}{6} = \frac{1}{2} = 0.5$$

$$4) \leftrightarrow 0 \quad 5) \downarrow \text{undefined} \quad 6) 6.49$$

$$7) \diagup \quad 8) \diagdown \quad 9) \text{---} \quad 10) \mid$$

11 - 18 on graph paper

$$19) y = 6 \quad 20) x = 2$$

$$21) y = 5x + 7$$

$$22) y = 3x - \frac{1}{2} \quad 23) y - 6 = -2(x + 4)$$

$$24) +b = -2(-4) + b$$

$$\begin{array}{r} +b = 8 + b \\ -8 \quad -8 \\ \hline -2 = b \end{array}$$

$$y = -2x - 2$$

$$25) m = \frac{6-9}{4-1} = \frac{-3}{3} = -1$$

$$9 = -1(1) + b$$

$$9 = -1 + b$$

$$\begin{array}{r} +1 \quad +1 \\ \hline 10 = b \end{array}$$

$$y = -x + 10$$

$$26) y = 2x + 6$$

$$27) y = -\frac{1}{4}x + 5$$

$$28) A. m = 3 \quad - \$ \text{ per box to move}$$

$$B. b = 100 \quad - \text{their flat rate fee}$$

$$C. y = 3x + 100$$

$$D. y = 3(25) + 100 = 75 + 100 = \$175$$

$$29) \begin{array}{r} 169 = 11.50x + 8 \\ -8 \quad -8 \end{array}$$

$$\begin{array}{r} 161 = 11.50x \\ \hline 11.5 \quad 11.50 \end{array}$$

$$x = 14 \text{ shirts}$$

$$30) \quad 1.2 + 0.35x = 2.8 + 0.15x$$

$$\quad \quad \quad - .15x \quad \quad \quad - .15x$$

$$\hline 1.2 + 0.2x = 2.8$$

$$\quad \quad \quad - 1.2 \quad \quad \quad - 1.2$$

$$\hline 0.2x = 1.6$$

$$\quad \quad \quad \cdot 2 \quad \quad \quad \cdot 2$$

$$x = 8$$

$$P = 1.2 + 0.35(8)$$

$$= \$4$$

31) A. She starts the week with 305 papers to grade

B. She can grade 40 papers per day

32)  $a + s = 450$  (adult + student tickets = 450 tickets sold)  
 $8a + 4s = 2200$  ( $\$8$  per adult +  $\$4$  per student = total  $\$$  earned)

$$33) \quad 400 = 50n - 300$$

$$\quad \quad \quad + 300 \quad \quad \quad + 300$$

$$\hline 700 = 50n$$

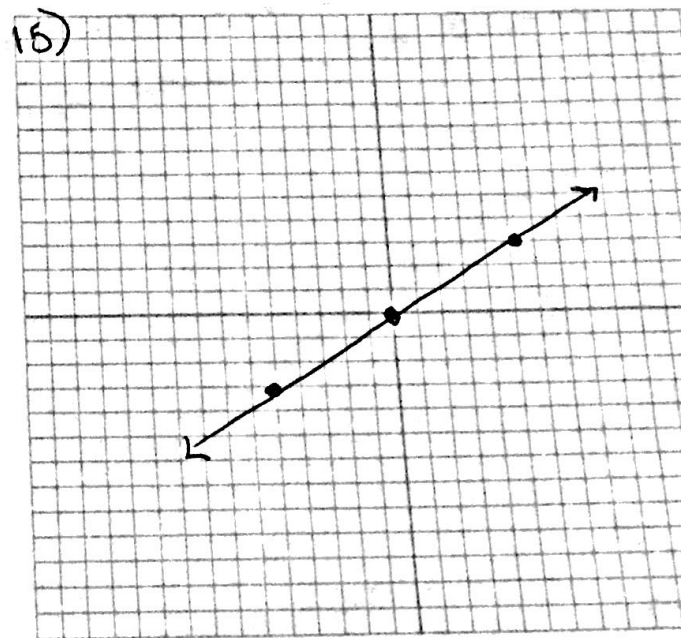
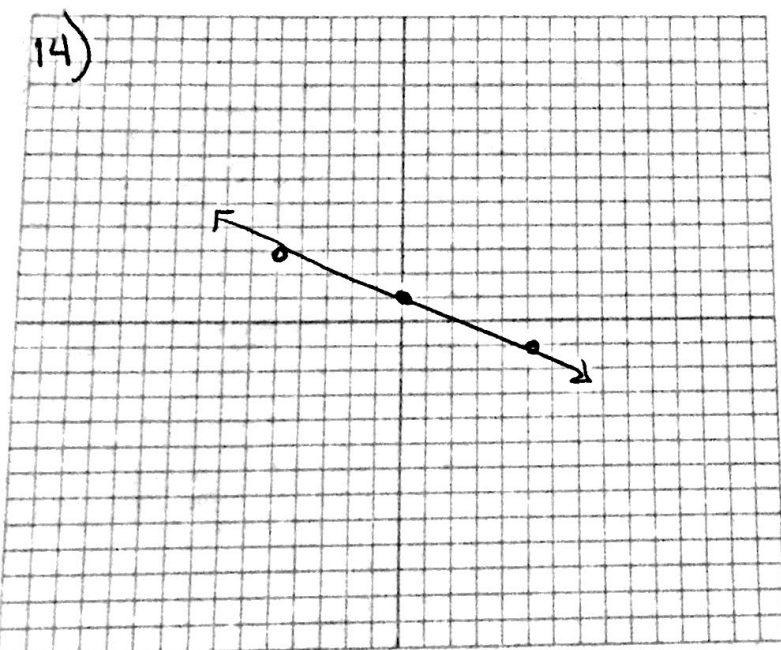
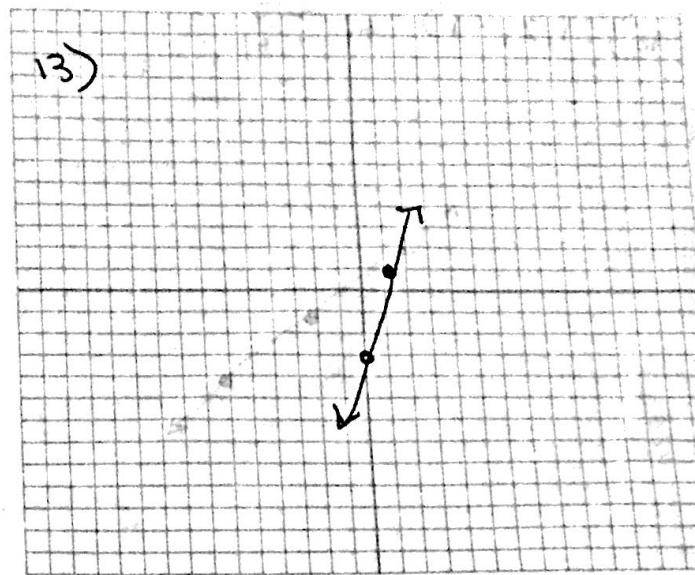
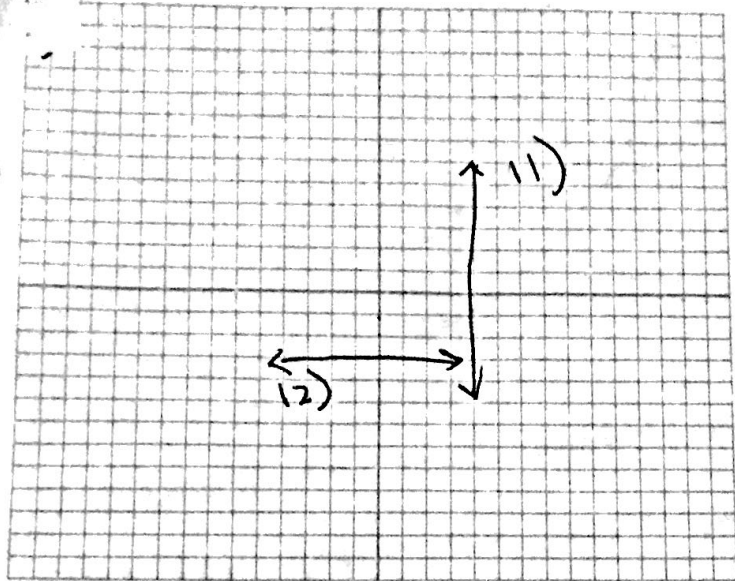
$$\quad \quad \quad n = 14 \text{ games}$$

34) A. Clean Cycle (their machine is initially valued at  $\$600$  while Washers Plus is  $\$500$ )

B. Washers Plus  $M = -100$

Clean Cycle  $M = -60$

Washers Plus loses value  $\$40$  faster per month than Clean Cycle

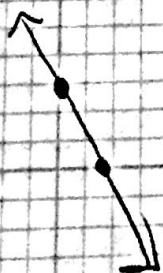


$$0) \quad 4(0) + 2y = 6$$

$$y = 3$$

$$4x + 2(0) = 6$$

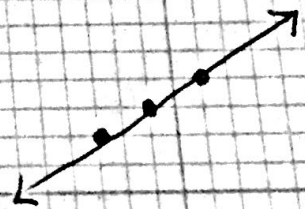
$$x = \frac{6}{4} = 1.5$$



$$\frac{2y}{2} = \frac{-4x}{2} + \frac{6}{2}$$

$$y = -2x + 3$$

$$17) \quad (-3, 2)$$



18)  $(2, -1)$   $m = -\frac{3}{4}$

